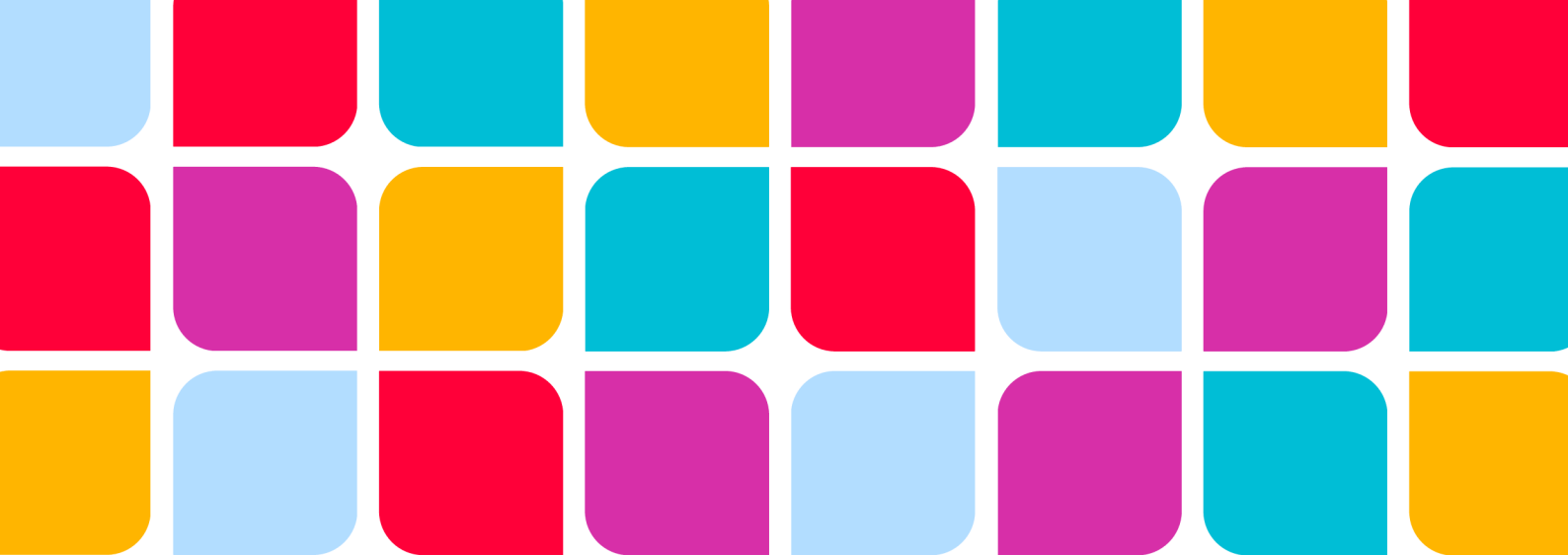




2026-2027

PROGRAM OF STUDY GUIDES

Electrical Engineering
Mechanical Engineering
Process Engineering



**Computer Science,
Engineering & Mathematics**



First Year

1st Semester (17 hrs)			2nd Semester (17 hrs)		
Course	Title	hrs	Course	Title	hrs
ELCT A101^	Introduction to Elect Engr I	3	ELCT A102*	Introduction to Elect Engr II	3
ENGL A101	Composition	3	MATH A344	Linear Algebra for CS & Engr	3
CHEM A111	General Chemistry I & Lab	4	ENGL A102	Composition and Literature	3
MATH A141	Calculus I	4	MATH A142	Calculus II	4
CSCI A125	Intro. to Computer Science	3	ENCP A300*	Engineering Seminar	1
			GEN ED	Humanities	3

Second Year

1st Semester (17 hrs)			2nd Semester (15 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A220^	Mechanical Engr Fundamentals	3	ELCT A222*	Electrical Circuits II	3
ELCT A221	Electrical Circuits I	3	ELCT A222L*	Electrical Circuits II Lab	1
MATH A241	Calculus III	4	MATH A242	Elem. Differential Equations	4
PHYS A211^	Essentials of Physics I & Lab	4	PHYS A212*	Essentials of Physics II & Lab	4
COMM A241	Public Speaking	3	STAT A509	Statistics for Engineers	3

Third Year

1st Semester (16 hrs)			2nd Semester (17 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A368^	Mechatronics	3	ELCT A342*	Signals and Systems	3
ELCT A320^	Electronic Devices	3	ELCT A310*	Digital Logic Design	3
ELCT A320L^	Electronic Devices Lab	1	ELCT A329*	Microprocessors/Controllers	3
ELCT A348^	Electromagnetic Fields	3	ELCT A329L*	Microprocessors/Controllers Lab	1
MATH A174	Discrete Mathematics	3	ELCT A346*	Electrical Power Systems	3
HIST A101/A102	GEN ED Global Cultures	3	ENCP A300*	Engineering Seminar	1
			GEN ED	Humanities	3

Fourth Year

1st Semester (15 hrs)			2nd Semester (15 hrs)		
Course	Title	hrs	Course	Title	hrs
ELCT A498^	Senior Capstone I	3	ELCT A499*	Senior Capstone II	3
ELCT A434^	Power Electronics	3	TECH ELECT	Technical Elective	3
ELCT A412^	Communication Systems	3	ENCP A421*	Engineering Economics	3
ECON A221/A222	Micro/Macro Economics	3	POLI A201 or HIST A201/A202	GEN ED: American Political Institutions	3
TECH ELECT	Technical Elective	3	PHIL A325	Engineering Ethics	3

^Fall only *Spring only

Course frequency notes are subject change and do not include courses managed by other departments

Bachelor of Science in Electrical Engineering Guidesheet

GENERAL EDUCATION REQUIREMENTS

A. Human Culture, Physical/Nat World (16)

Course	Credits
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Natural Sciences¹

CHEM A111	4
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Social/Behavioral Sciences

ECON A221/A222	3
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Global Cultures

HIST A101 or A102	3
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Two Humanities Courses² (at least 2 areas)

	3
	3

One 3-Credit Non-Western World Studies Course²

List Course:

B. Intellectual and Practical Skills (13)

ENGL A101	3
ENGL A102	3
COMM A241	3

Mathematics¹

MATH A141	4
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Writing Intensive Courses

ELCT A320, A498, A499

C. Personal and Social Responsibility (3)

Americal Political Institutions (API)

POLI A201, HIST A201/A202	3
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Academic Enrichment Program (ACE)²

Two approved events in each semester of enrollment

For more information, see ACE Program requirements

COLLEGE REQUIREMENTS (15)

PHYS A211 ¹	4
PHYS A212 ¹	4
PHIL A325	3
MATH A142 ¹	4

¹Must earn a grade of C or better

²See the Academic Bulletin for qualifying courses for listed categories and for information on ICE events.

PROGRAM REQUIREMENTS¹

CORE COURSES (70)

Course	Credits
CSCI A125	3
ELCT A101	3
ELCT A102	3
ELCT A221	3
ELCT A222	3
ELCT A222L	1
ELCT A310	3
ELCT A320	3
ELCT A320L	1
ELCT A329	3
ELCT A329L	1
ELCT A342	3
ELCT A346	3
ELCT A348	3
ELCT A412	3
ELCT A434	3
ENCP A220	3
ENCP A300 (x2)	2
ENCP A368	3
ENCP A421	3
MATH A174	3
MATH A241	4
MATH A242	4
MATH A344	3
STAT A509	3

TECHNICAL ELECTIVES (6)¹

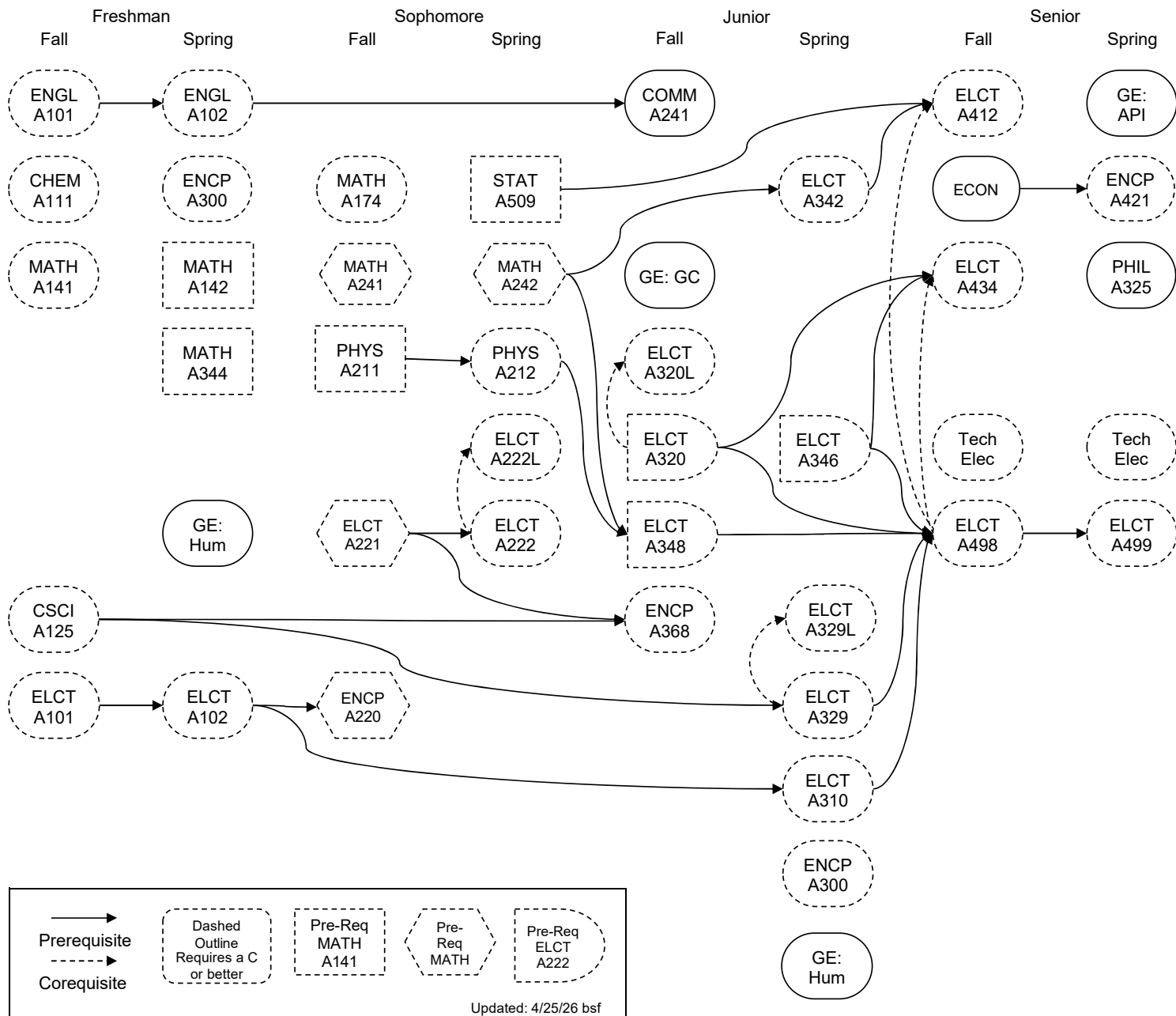
	3
	3

Any ENCP/ELCT course (A300 or higher not required by major), any CSCI course (A145 or higher not required by major), any MATH course (A300 or higher not required by major), or any department approved course.

CAPSTONE (6)¹

ELCT A498	3
ELCT A499	3

Bachelor of Science in Electrical Engineering Curriculum 2026-27 Pre-/Co-Requisite Flowchart



First Year

1st Semester (17 hrs)			2nd Semester (17 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A101^	Introduction to Engineering I	3	ENCP A102*	Introduction to Engineering II	3
CHEM A111	General Chemistry I & Lab	4	ENGL A102	Composition and Literature	3
ENGL A101	Composition	3	CSCI A125	Introduction to Computer Science	3
MATH A141	Calculus I	4	MATH A142	Calculus II	4
GEN ED	Humanities	3	ENCP A301	Intro to Numerical Methods	3
			ENCP A300*	Engineering Seminar	1

Second Year

1st Semester (17 hrs)			2nd Semester (17 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A200^	Statics	3	ENCP A290*	Thermodynamics Fund.	3
MATH A344	Linear Algebra for CS & Engr	3	ENCP A260*	Intro to Mechanics of Solids	3
MATH A241	Calculus III	4	MATH A242	Elem. Differential Equations	4
PHYS A211^	Essentials of Physics I & Lab	4	PHYS A212*	Essentials of Physics II & Lab	4
COMM A241	Public Speaking	3	POLI A201 or HIST A201/A202	GEN ED: American Political Institutions	3

Third Year

1st Semester (15 hrs)			2nd Semester (14 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A361^	Instrumentation, Meas, Stats	3	ENCP A327*	Design of Mech. Elements	3
ENCP A371^	Engineering Materials	3	ENCP A377*	Manufacturing Processes	3
ENCP A360^	Fluids	3	ENCP A310*	Dynamics	3
ELCT A221	Electrical Circuits I	3	ENCP A354*	Heat Transfer	3
HIST A101/A102	GEN ED Global Cultures	3	ENCP A354L*	Heat Transfer Lab	1
			ENCP A300*	Engineering Seminar	1

Fourth Year

1st Semester (15 hrs)			2nd Semester (15 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A498^	Senior Capstone I	3	ENCP A499*	Senior Capstone II	3
ENCP A368^	Mechatronics	3	TECH ELECT	Technical Elective	3
ENCP A332^	Kinematics	3	GEN ED	Humanities	3
TECH ELECT	Technical Elective	3	ENCP A421*	Engineering Economics	3
ECON A221/A222	Micro/Macro Economics	3	PHIL A325	Engineering Ethics	3

^Fall only *Spring only

Course frequency notes are subject change and do not include courses managed by other departments

Bachelor of Science in Mechanical Engineering Guidesheet

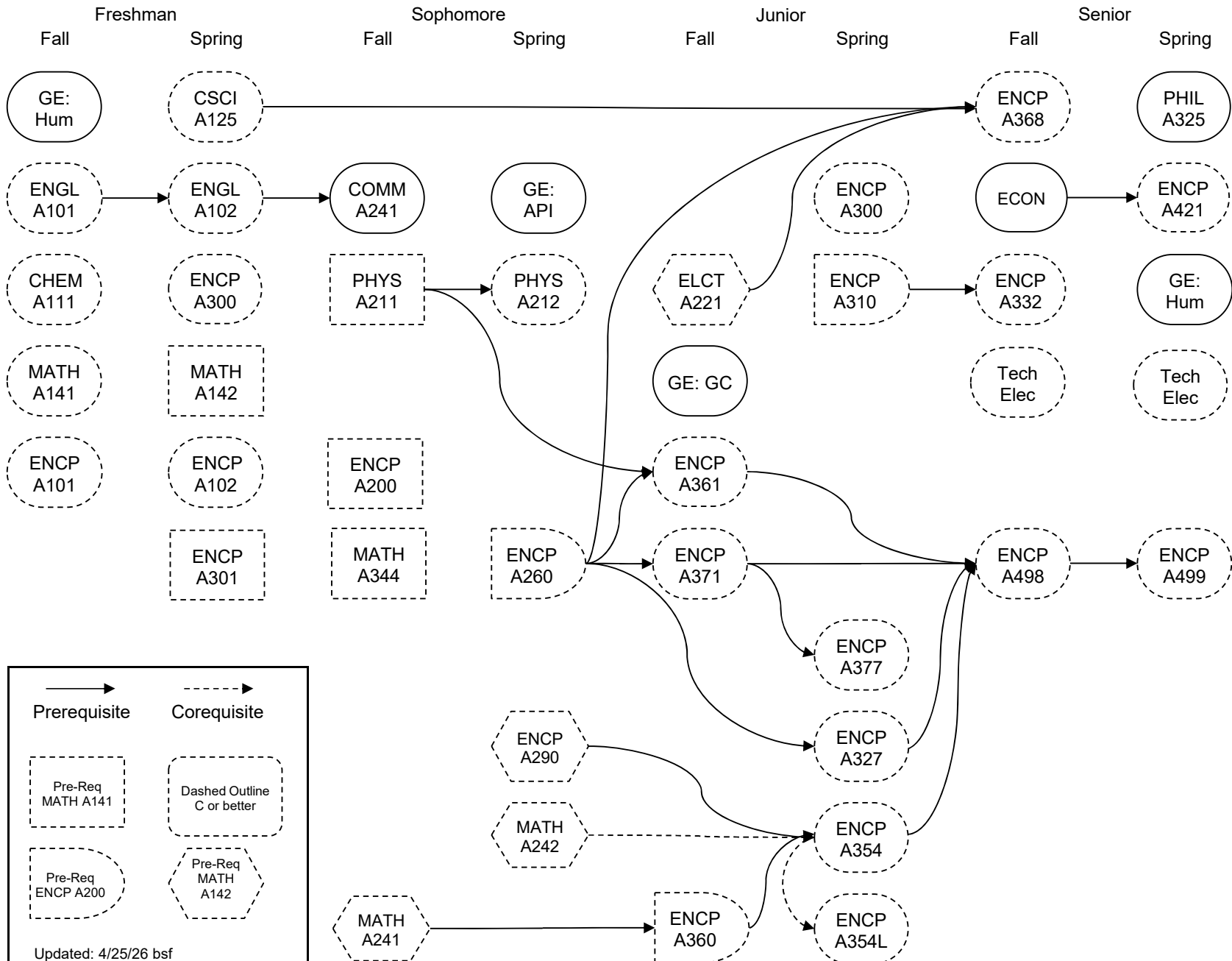
GENERAL EDUCATION REQUIREMENTS	
A. Human Culture, Physical/Nat World (16)	
Course	Credits
Natural Sciences¹	
CHEM A111	4
Social/Behavioral Sciences	
ECON A221 or A222	3
Global Cultures	
HIST A101 or A102	3
Two Humanities Courses² (at least 2 areas)	
	3
	3
One 3-Credit Non-Western World Studies Course²	
List Course:	
B. Intellectual and Practical Skills (13)	
ENGL A101 ¹	3
ENGL A102 ¹	3
COMM A241	3
Mathematics³	
MATH A141	4
Writing Intensive Courses	
ENCP A361, A498, A499	
C. Personal and Social Responsibility (3)	
Americal Political Institutions (API)	
POLI A201, HIST A201/A202	3
Academic Enrichment Program (ACE)²	
Two approved events in each semester of enrollment	
For more information, see ACE Program requirements	
COLLEGE REQUIREMENTS (15)	
PHYS A211 ¹	4
PHYS A212 ¹	4
PHIL A325	3
MATH A142 ¹	4

¹Must earn a grade of C or better

²See the Academic Bulletin for qualifying courses for listed categories and for information on ACE events.

PROGRAM REQUIREMENTS ¹	
CORE COURSES (68)	
Course	Credits
CSCI A125	3
ELCT A221	3
ENCP A101	3
ENCP A102	3
ENCP A200	3
ENCP A260	3
ENCP A290	3
ENCP A300 (x2)	2
ENCP A301	3
ENCP A310	3
ENCP A327	3
ENCP A332	3
ENCP A354	3
ENCP A354L	1
ENCP A360	3
ENCP A361	3
ENCP A368	3
ENCP A371	3
ENCP A377	3
ENCP A421	3
MATH A241	4
MATH A242	4
MATH A344	3
TECHNICAL ELECTIVES (6) ¹	
	3
	3
Any ENCP course (A300 or higher not required by major), any CSCI course (A145 or higher not required by major), any MATH course (A300 or higher not required by major), STAT A509, or any department approved course.	
CAPSTONE (6) ¹	
ENCP A498	3
ENCP A499	3

Bachelor of Science in Mechanical Engineering Curriculum 2026-27 Pre-/Co-Requisite Flowchart





First Year

1st Semester (17 hrs)			2nd Semester (15 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A101^	Introduction to Engineering I	3	ENCP A102*	Introduction to Engineering II	3
ENGL A101	Composition	3	ENGL A102	Composition and Literature	3
CHEM A111	General Chemistry I & Lab	4	CHEM A112	General Chemistry II & Lab	4
MATH A141	Calculus I	4	MATH A142	Calculus II	4
GEN ED	Humanities	3	ENCP A300*	Engineering Seminar	1

Second Year

1st Semester (17 hrs)			2nd Semester (17 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A200^	Statics	3	ENCP A290*	Thermodynamics Fund.	3
ELCT A221	Electrical Circuits I	3	ENCP A260*	Intro to Mechanics of Solids	3
MATH A241	Calculus III	4	MATH A242	Elem. Differential Equations	4
PHYS A211^	Essentials of Physics I & Lab	4	PHYS A212*	Essentials of Physics II & Lab	4
COMM A201 or COMM A241	GEN ED: Oral Communications	3	STAT A509	Statistics for Engineers	3

Third Year

1st Semester (15 hrs)			2nd Semester (16 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A361^	Instrumentation, Meas, Stats	3	ENCP A334*	Quality Control & Planning	3
ENCP A371^	Engineering Materials Lab	3	ENCP A327*	Design of Mech. Elements	3
ENCP A360^	Fluids	3	ENCP A310*	Dynamics	3
ENCP A316^/A368^	Control Systems/Mechatronics	3	ENCP A300*	Engineering Seminar	1
BADM A271	Principles of Management	3	MGSC A494	Project Management	3
			HIST A101/A102	GEN ED Global Cultures	3

Fourth Year

1st Semester (15 hrs)			2nd Semester (15 hrs)		
Course	Title	hrs	Course	Title	hrs
ENCP A380^	Systems Engineering	3	ENCP A421*	Engineering Economics	3
ENCP A498^	Senior Capstone I	3	ENCP A499*	Senior Capstone II	3
TECH ELECT	Technical Elective	3	PHIL A325	Engineering Ethics	3
GEN ED	Humanities	3	TECH ELECT	Technical Elective	3
ECON A221/A222	Micro/Macro Economics	3	POLI A201 or HIST A201/A202	GEN ED: American Political Institutions	3

^Fall only *Spring only

Course frequency notes are subject change and do not include courses managed by other departments

Bachelor of Science in Process Engineering Guidesheet

GENERAL EDUCATION REQUIREMENTS	
A. Human Culture, Physical/Nat World (16)	
Course	Credits
Natural Sciences¹	
CHEM A111	4
Social/Behavioral Sciences	
ECON A221 or A222	3
Global Cultures	
HIST A101 or A102	3
Two Humanities Courses² (at least 2 areas)	
	3
	3
One 3-Credit Non-Western World Studies Course²	
List Course:	
B. Intellectual and Practical Skills (13)	
ENGL A101 ¹	3
ENGL A102 ¹	3
COMM A201 or A241	3
Mathematics¹	
MATH A141	4
Writing Intensive Courses	
ENCP A361, A498, A499	
C. Personal and Social Responsibility (3)	
Americal Political Institutions (API)	
POLI A201, HIST A201/A202	3
Academic Enrichment Program (ACE)²	
Two approved events in each semester of enrollment	
For more information, see ACE Program requirements	
COLLEGE REQUIREMENTS (15)	
PHYS A211 ¹	4
PHYS A212 ¹	4
PHIL A325	3
MATH A142 ¹	4

¹Must earn a grade of C or better

²See the Academic Bulletin for qualifying courses for listed categories and for information on ACE events.

PROGRAM REQUIREMENTS	
CORE COURSES (62) ¹	
Course	Credits
CHEM A112	4
ELCT A221	3
ENCP A101	3
ENCP A102	3
ENCP A200	3
ENCP A260	3
ENCP A290	3
ENCP A300 (x2)	2
ENCP A310	3
ENCP A316/A368	3
ENCP A327	3
ENCP A334	3
ENCP A360	3
ENCP A361	3
ENCP A371	3
ENCP A380	3
ENCP A421	3
MATH A241	4
MATH A242	4
STAT A509	3
BUSINESS COMPONENT (6)	
BADM A271	3
MGSC A494	3
TECHNICAL ELECTIVES (6)	
	3
	3
Any ENCP ¹ course (A300 or higher not required by major), any CSCI ¹ course (A125 or higher not required by major), any MATH ¹ course (A300 or higher not required by major), any MGMT course (A300 or higher not required by major), any BADM course (A300 or higher not required by major), any CHEM ¹ course (A300 or higher not required by major), or any department approved course.	
CAPSTONE (6) ¹	
ENCP A498	3
ENCP A499	3

Bachelor of Science in Process Engineering Curriculum

2026-27 Pre-/Co-Requisite Flowchart

